

EPA INTERIM ASSESSMENT OF MARYLAND'S 2012-2013 MILESTONES AND WIP PROGRESS

EPA is providing this interim assessment of Maryland's progress towards meeting its 2012-2013 sector-specific milestones to assist Maryland in meeting its short-term goals and maintaining progress on its Watershed Implementation Plan (WIP).

Load Reduction and BMP Implementation Progress

According to the data provided by Maryland for the 2012 progress run, the state has achieved its 2013 nitrogen and sediment targets, largely due to the wastewater sector surpassing its milestone goals, and is within 1% of reaching its phosphorus milestone target despite an increase in loads from 2011 to 2012. For future progress runs starting in 2013, EPA encourages Maryland to clarify the source of Best Management Practices (BMP) data and distinguish actual increases in implementation from improved reporting of existing implementation when reporting annually to the Chesapeake Bay Program Office. *The following chart contains a sample of BMPs that Maryland has implemented in 2012 to achieve progress towards its 2013 milestone targets, as well as 2012 delivered loads and 2013 target loads for wastewater.*

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Commented [KWA2]: Not going to fall on my sword, but having full sentence in italics is messy

Implementation of Select BMPs ¹ and Wastewater Loads				
		Unit	2012 Progress ²	2013 Milestone Target ²
Agriculture	Nutrient Application Management (All Forms)	Acres	859,469	1,219,566
	Cover Crops (All Forms)	Acres	407,591	355,000
	Conservation Plans	Acres	970,250	826,000
	Mortality Composting	Animal Units	7,467	7,558
Urban	Retrofit Stormwater Management	Acres	71,557	76,603
Wastewater	Nitrogen Loads	Pounds delivered to the Chesapeake Bay	12,362,504	14,386,714
	Phosphorus Loads	Pounds delivered to the Chesapeake Bay	647,137	674,426
	Wastewater Facilities Meeting Water Quality Standards in Chesapeake Bay ³	Facilities Meeting/ Total Facilities (Percent of Facilities)	46/82 (56%)	56/82 (68%)
	Major Municipal Facilities	Number Facilities Upgraded to ENR in the Milestone Period	6/10	15

Commented [je3]: MD added this additional milestone that they had in their 12/13 fact sheet and proposed taking out the the Facilities Meeting WQ milestone. We're are ok with adding this but with not deleting the other.

Notes:

¹ Table only includes a subset of BMPs that were implemented and reported by jurisdictions in their 2012 progress runs and projected by jurisdictions in their 2013 milestone targets. At the end of the 2012-2013 milestone period, EPA will assess implementation based on achievement of the milestone target nitrogen, phosphorus and sediment loads. Therefore, jurisdictions may change the BMPs that they implement during the milestone period to achieve their milestone target loads.

² 2012 progress and 2013 targets represent the total acres, feet, or animal units that will have BMPs in place as of 2012 or 2013. Values do not represent a net increase in BMP levels compared to the start of the milestone period in 2011. 2012 actual loads and 2013 target loads are provided for wastewater.

³ The 2013 Milestone reflects total agricultural acres subject to nutrient management planning requirements, whereas 2012 progress is based on agricultural acres in compliance with nutrient management planning requirements.

The 2013 Milestone reflects total acres with nutrient management plans, which should eventually include an estimated

Commented [KWA4]: My first preference is to remove this footnote, but if we keep it in I suggest rewording as edited.

compliance rate of approximately 70%. Without this omission the 2012 and 2013 averages are more comparable. Of the 30% non-compliance, about 22% represent plans that are out of date, but being followed.

⁹ Based on permits for significant facilities with effluent limits in effect that meet DO and SAV/clarity standards.

Commented [je5]: One option would be to allow the footnote but only the first sentence and with some edits to it.

Commented [maf6]: This footnote for discussion among EPA managers on 5/13.

Commented [maf7]: Check footnote numbering here and in the table above.

Agriculture – Ongoing Oversight

2012 Achievements

- Maryland has continued to increase cover crop implementation since 2009.
- Maryland revised nutrient management regulations to modify how a farm nutrient management plan is developed and implemented and to change the way that organic nutrient sources and other materials are managed. The new requirements will be phased in over the next several years.
- In 2013, Maryland enacted legislation for an agriculture certainty program for farmers to incentivize implementation of practices included in its Watershed Implementation Plan (WIP).
- Maryland completed development of a new phosphorus management tool, the use of which will be required for the 2014 crop year. Implementing regulations were published in January, 2013.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- While it is commendable that Maryland uses farmer surveys to improve data quality, it will be important for the State to develop protocols starting in 2013 to verify that these self-reported practices are properly designed, installed, and maintained in order to meet forthcoming verification standards and improve reporting of future progress data in 2014/15 submissions.
- MDA and EPA will work to a) incorporate new agriculture BMPs in the 2013 progress model run such as nutrient reductions for manure incorporation and poultry litter treatment, and b) limit cutoff of BMPs in the 2013 progress model run.

Commented [je8]: I added this language to address MDs concern. They wanted to delete or move.

Urban/Suburban Stormwater – Ongoing Oversight

2012 Achievements

- Maryland finalized urban nutrient management regulations to control fertilizer on turf.
- Maryland enacted legislation requiring all Phase I Municipal Separate Storm Sewer Systems (MS4) jurisdictions to establish stormwater utility fee systems to finance urban/suburban stormwater implementation.
- Maryland developed Phase I MS4 permit revisions and reached tentative determinations to implement the Bay Total Maximum Daily Load (TMDL) in Baltimore City, Baltimore County, and Prince George's County.
- Maryland has submitted to EPA a revised MS4 permit for Anne Arundel County, consistent with the Prince George's County template.

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- Maryland has fallen behind the schedule for reissuing Phase I MS4 permits that was included in the Phase II WIP. EPA expects Maryland to accelerate progress in 2013 on revisions to remaining Phase I and Phase II MS4 permits that have not yet been revised to implement the Bay TMDL.

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- EPA expects Maryland to submit a revised schedule for completion of MS4 permit reissuance in 2013. EPA expects Maryland finalize its stormwater manual in 2013 in order to provide an enforceable basis for stormwater and construction permits.
- In conjunction with the Historical BMP Cleanup process and pending BMP verification protocols, EPA expects Maryland to begin reporting BMP implementation on new development based on State permit compliance data rather than assuming that all new development meets with the "Environmental Site Design to the Maximum Extent Practicable" standard.

Commented [maf9]: We will keep this bullet as is until we receive the new schedule from MDE, which Jay Sakai told us he would provide to us before this assessment is final.

Commented [maf10]: The status of this bullet remains unresolved as of 5/13. Here is the input from Matt Johnston on 5/13: Maryland's comment "s13" contains more information than we received through our conversations with MDE during 2012 Progress, so I cannot confirm the exact methods they used in assigning the number of acres of filtering BMPs. MDE did ask us to provide the change in impervious acres from 2011 to 2012, but we did not fulfill that request because: 1) they were already given the data previously; and 2) we had just been made aware of how they planned to use the data to develop acres of filtering BMPs that would cover all new impervious acres in the Model. The basic idea here is that Maryland should not be attempting to match their BMP implementation to any projected acres whether it be our projected acres or their own projected acres, but should instead be reporting BMPs based on permit compliance.

Wastewater Treatment Plants and On-site Systems – Ongoing Oversight **2012 Achievements**

- Maryland amended the Bay Restoration Fund (BRF) statute to provide adequate funding for pending Enhanced Nutrient Removal (ENR) upgrades at major municipal wastewater plants.
- The BRF also will fund the most cost-effective ENR upgrades to minor municipal wastewater plants. A final list of candidate plants is pending from Maryland's BRF Advisory Committee.
- Maryland enacted new legislation to require growth planning tiers in all counties to increase control over residential subdivision growth that is served by septic systems.
- Maryland enacted amendments to BRF legislation to provide financing for septic system upgrades. Maryland noted that the BRF legislation and regulations do not provide for all of the upgrades that Maryland committed to by 2017 in its Phase II WIP.
- Maryland adopted new regulations to require best available nutrient reduction technology for all new on-site systems in the Chesapeake Bay watershed and the Atlantic Coastal Bays watershed.

Commented [s11]: We currently include 1) a lower BMP efficiency than ESD, i.e., filtering BMPs, 2) include a compliance factor less than 1. Consistent in level of accuracy with EPA's annual projections of land use development.

Commented [KWA12]: Confirm w/ Jeff, Matt that MD's comment is correct.

Commented [s13]: Recommend this be moved to the 2014-2015 Milestone Period recommendations.

Commented [KWA14]: Removed "historic BMP cleanup" b/c not sure how relates to this issue, and removed "begin" b/c this is something they should currently be doing. Add'l edits for accuracy based on MD's comment that already assuming compliance factor of less than 1.

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Improvements to Meet 2012/2013 Milestones and Maintain WIP Progress

- EPA expects Maryland to reissue the remaining four expired permits for significant treatment plants that need to incorporate Bay TMDL waste load allocations.

Offsets and Trading – Ongoing Oversight **2012 Achievements**

- Maryland engaged in extensive outreach in 2012 and developed draft regulations for an Accounting for Growth (AfG) program. Because stakeholders were far from consensus, a stakeholder workgroup was established, led by a facilitator. The workgroup has agreed upon guiding principles and committed to providing recommendations to the State by the end of June 2013.
- EPA understands that Maryland is proceeding to develop, by the end of 2013, an AfG program following a set of guiding principles to assure that new loads that do not have allocations must be offset.

Commented [KWA15]: Note this is new language proposed by MD

Improvements to Meet 2012-2013 Milestones and Maintain WIP Progress

- A response to the common recommendations that EPA made in its 2012 trading and offset program assessment is due to EPA by the end of 2013. EPA is issuing Technical Memoranda to assist with this response as well as guide development and implementation of trading and offsets programs.

- MD did not provide adequate information in its response to EPA's request for an initial demonstration that new loads are being identified, tracked and managed consistent with the Bay TMDL allocations, assumptions and Appendix S. Information needed to supplement the Maryland submission includes:
 - If any new or increased loads have occurred or are projected to occur and a description of whether those loads have been offset and how;
 - A clear explanation of how the jurisdiction accounts for and offsets loads when land conversion takes place;
 - A description of the system in place for tracking changes in loads; and
 - A commitment to re-evaluate sector growth periodically.

Commented [maf16]: We will keep these four bullets in the document until we get responses from MD regarding the current status of their program sufficient to justify removal.

Suggested Considerations for Development of 2014-2015 Milestones

- As Maryland has recognized, consider milestones to increase the pace of nitrogen reductions. EPA expects milestones for nitrogen, phosphorus and sediment targets to be on track for achieving the goal of having practices in place by 2017 that would achieve 60% of the necessary load reductions compared to 2009.
- Consider new programmatic milestones to address implementation support and/or data tracking and reporting issues related to practices for which significant increases in implementation are anticipated, such as decision agriculture and livestock waste management systems.
- Consider new milestones to address programmatic needs that are likely to result from implementation of new nutrient management regulations, such as monitoring and/or enforcement staffing.
- Consider a new programmatic milestone to increase capacity to handle greater animal composting demand. EPA notes that Maryland's 2017 and 2025 milestones for poultry mortality composting are significantly lower than the 2013 milestone, but animal units are increasing with no anticipated change in mortality rates.
- Consider a new programmatic milestone to renew the general discharge permit for Concentrated Animal Feeding Operations.
- Consider programmatic milestones to increase nutrient management plan compliance.

Summary Points and Next Steps

- EPA will continue to host quarterly calls with Maryland to track progress.
- The Chesapeake Bay Program partnership is developing verification protocols in order for nutrient and sediment controls to be more accurately credited by the Chesapeake Bay Program models. These protocols will address the source of BMP implementation data and under-reported and non-cost shared practices and will include guidelines for identifying and removing duplicate records and addressing expired, failed, or removed practices.